

Torque wrench with permanent ratchet



Magnifying window scale enables easy, accurate read-off.

Strong, reversible ratchet, 32 teeth, 11.25° pivot range.

A spring-loaded ball ensures the sockets are firmly attached and cannot fall off. The release mechanism enables sockets to be removed and changed quickly at the push of a button.

The required torque is quickly set via a pull-out setting knob in the handle.

When the preset torque is attained, the wrench produces both audible and tactile signals.

Right-hand turn for controlled screw tightening.

Accuracy is in accordance with DIN/ISO 6789.1993, EN26789.1994

User friendly designed, comfortable handle

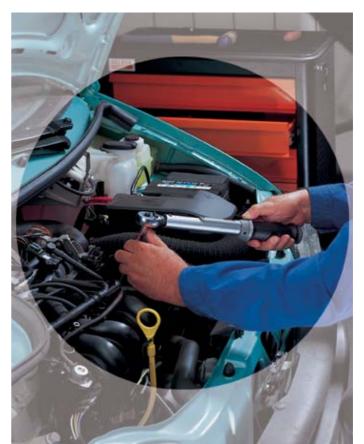
Chromium-plated

With test certificate in accordance with DIN/ISO 6789.1993, EN26789.1994

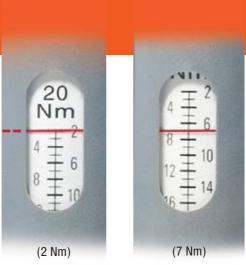
Measuring Range in Nm = Newton-Metre

Art. Code EAN-Code			Graduation			Drive	Length	Λ
	731415+		Capacity	Scale	Handle		mm	$\Delta_{g}\Delta$
7451-20	1845452	1	2-20 Nm	1 Nm	0.1 Nm	3/8"	355	900
7451-100	1845469	1	10-100 Nm	5 Nm	0.5 Nm	3/8"	418	1000
7851-200	1845476	1	20-200 Nm	10 Nm	1 Nm	1/2"	515	1300
7851-340	1845483	1	70-340 Nm	20 Nm	2 Nm	1/2"	515	1300





Torque wrench for interchangeable insert tools







For all assembly jobs, especially where access with conventional sockets is not possible.

Right-hand turn for controlled screw tightening (the torque wrench can also be used for controlled left screw tightening, when turned over by 180°).

Accuracy is in accordance with DIN/ISO 6789.1993, EN26789.1994.





Measuring Range in Nm = Newton-Metre

Art. Code	EAN-Code	~ <u>_</u>	Graduation			Insert	Length	Λ_7
	731415+		Capacity	Scale	Handle	mm mm	mm	$\Delta_{g}\Delta$
6852-20	1845490	1	2-20 Nm	1 Nm	0.1 Nm	9 x 12	355	800
7452-100	1845506	1	10-100 Nm	5 Nm	0.5 Nm	9 x 12	380	900
7852-200	1845513	1	20-200 Nm	10 Nm	1 Nm	14 x 18	493	1300
7852-340	1845520	1	70-340 Nm	20 Nm	2 Nm	14 x 18	493	1300
7452-100 7852-200	1845506 1845513	1 1 1	10-100 Nm 20-200 Nm	5 Nm 10 Nm	0.5 Nm 1 Nm	9 x 12 14 x 18	380 493	9

Calculating scale settings where an extension arm is used with the torque wrench

Each torque wrench has been specifically designed for a specific maximum scale reading and tested at this level. For various reasons, it may be necessary in practice to add an extension arm. To this end it is necessary to adjust the programming.

The required settings may be calculated using the following formula:

$$C = \frac{L1 \times T}{L1 + B}$$

L1= Length of the lever arm on the torque wrench itself

B = Distance between the two pivot centres after attaching the extension

T = Tightening torque of the bolt

C = Setting value

Example:

L1 = 425 mm

$$C = \frac{0,425 \times 20}{0.425 + 0.040} = \frac{8,5}{0.465} = 18,28$$

$$T = 20 \text{ Nm}$$

$$C = 18,28 \text{ Nm}$$



7451-DEMO-KIT



Torque Angle Gauge

Automotive manufacturers prescribe both torque and rotational angle settings for fastening elements used in vehicles.

Angle controlled torquing gives initially "snug" torque, then turns the fastener a step further to the optimum torquing angle.

Torque is measured to the maximum safe working load, while preventing overtorquing and damage to the fasteners.

Large, easy to read scale with oil resistant, non-reflective surface. The angle indicator clearly indicates the angular reading.

The adjustable reference arm is firmly attached to a non-moving part of the machine and prevents the scale turning.

ArtCode	EAN-Code 731415+		Drive	
7851-DW	1846602	1	1/2"	155
8951-DW	1846619	1	3/4"	520



- 1/2" female square drive on the input side.
- 1/2" male square drive on the output side.



- 3/4" female square drive on the input side.
- 3/4" nale square drive on the output side.

